

ABSTRACT OF THE INVENTION

A micro-pump includes a pumping chamber having a predetermined inner space to be filled with a fluid, at least one fluid entrance and at least one fluid exit, which are connected to the pumping chamber, a heating element provided at one side of the pumping chamber to generate bubbles in the pumping chamber by heating the fluid, and electrodes for applying current to the heating element, wherein the fluid is made to flow into or out of the pumping chamber by expansion and contraction of the bubbles, and wherein a cross-sectional area of at least one of the fluid entrance and the fluid exit varies along a direction in which the fluid flows. The micro-pump has a relatively simple structure, enhanced pumping efficiency and enhanced durability.